

# V&V Reference Report

## L2 ASCDS Version : 10.3

Observation 16576 - L2 Version 1  
Chandra X-Ray Center

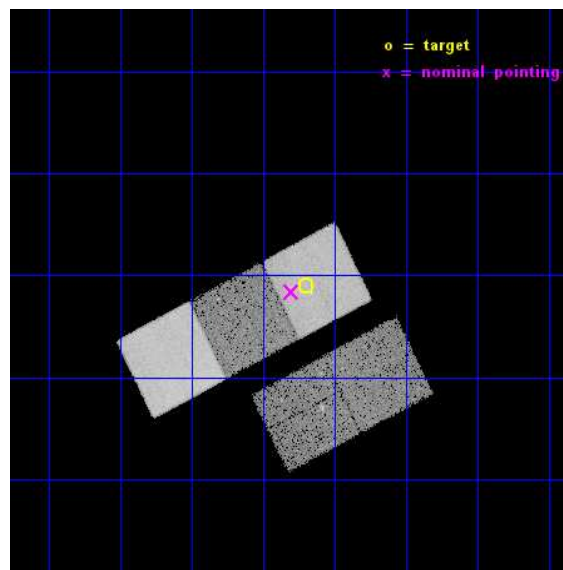
L2 Processing Date : Nov 11 2014

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# 1 Front

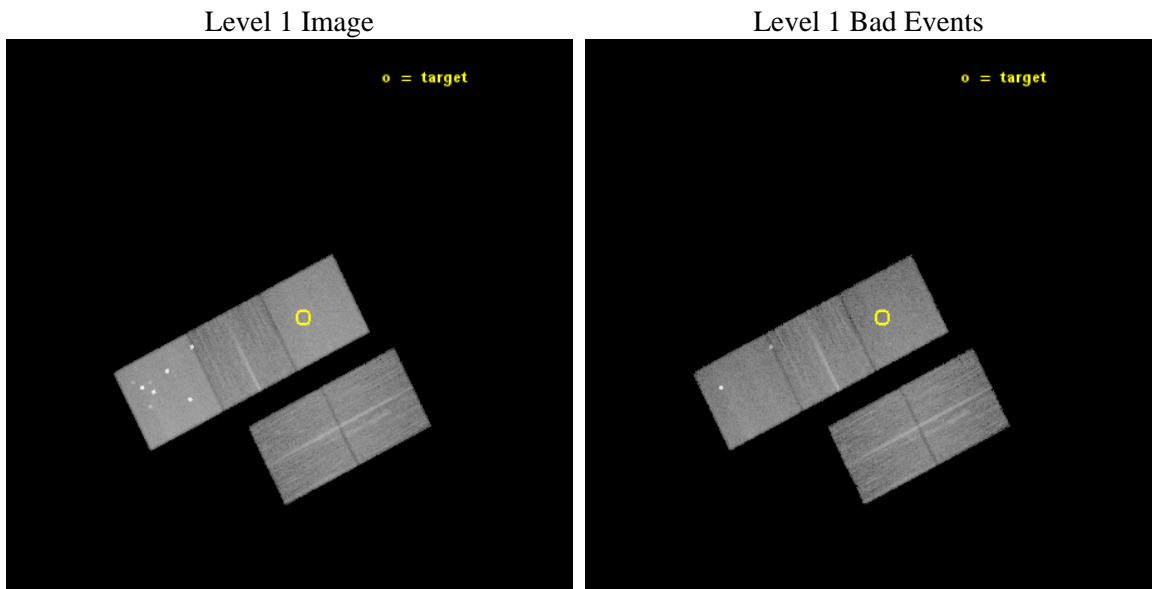
seq_num	801439	Sequence number
obs_id	16576	Observation id
title	Scaling Relations of Distant, SZ-confirmed XXL Galaxy Clusters	Pro
observer	Dr Adam Mantz	Principal investigator
object	XLSSJ021711.95-041059	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	34.3	Observer's specified target RA [deg]
dec_targ	-4.183	Observer's specified target Dec [deg]
ra_nom	34.325776783549	Nominal RA [deg]
dec_nom	-4.1932769500982	Nominal Dec [deg]
roll_nom	332.93534423684	Nominal Roll [deg]
revision	1	Processing version of data
ontime	27066.100208163	Sum of GTIs [s]
livetime	26712.461683171	Livetime [s]
ontime2	27062.95914793	Sum of GTIs [s]
ontime3	27062.95914793	Sum of GTIs [s]
ontime5	27066.100208163	Sum of GTIs [s]
ontime6	27066.100208163	Sum of GTIs [s]
ontime7	27066.100208163	Sum of GTIs [s]
l2events	203223	Number of level 2 events



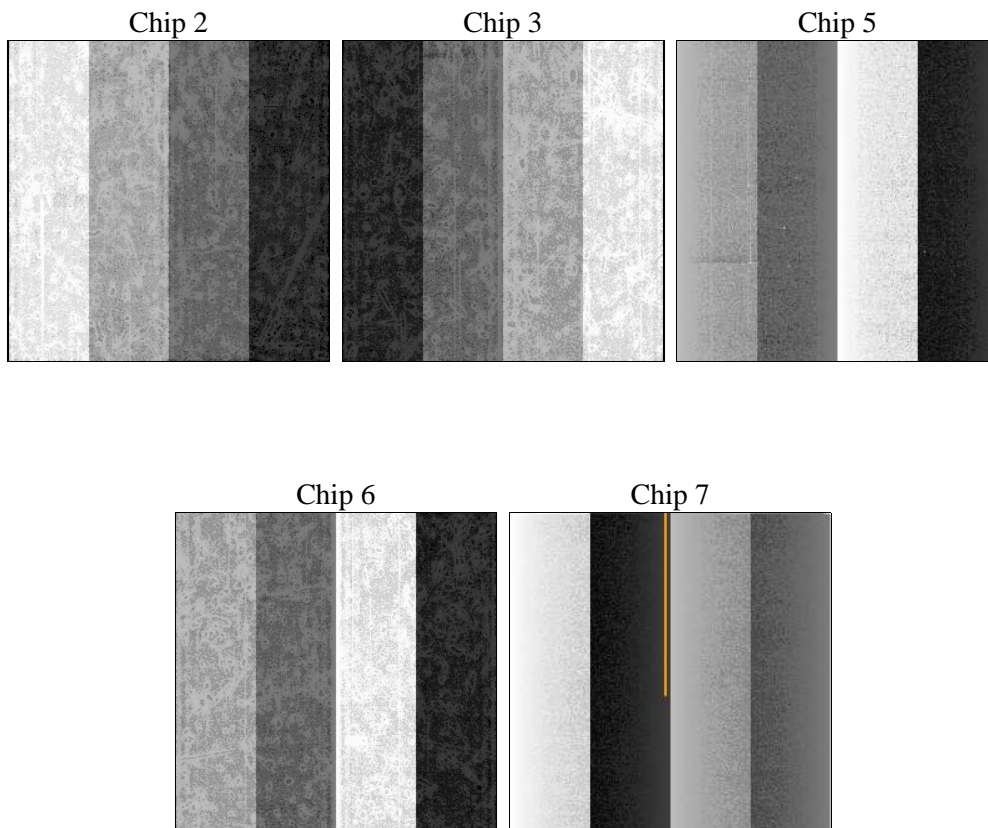
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	27066.100208163	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime2	27062.95914793	Sum of GTIs [s]
date	2014-11-11T16:56:50	Date and time of file creation	ontime3	27062.95914793	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	27066.100208163	Sum of GTIs [s]
			ontime6	27066.100208163	Sum of GTIs [s]
			ontime7	27066.100208163	Sum of GTIs [s]
			l1events	784996	Number of level 1 events

### 2.1.4 Events

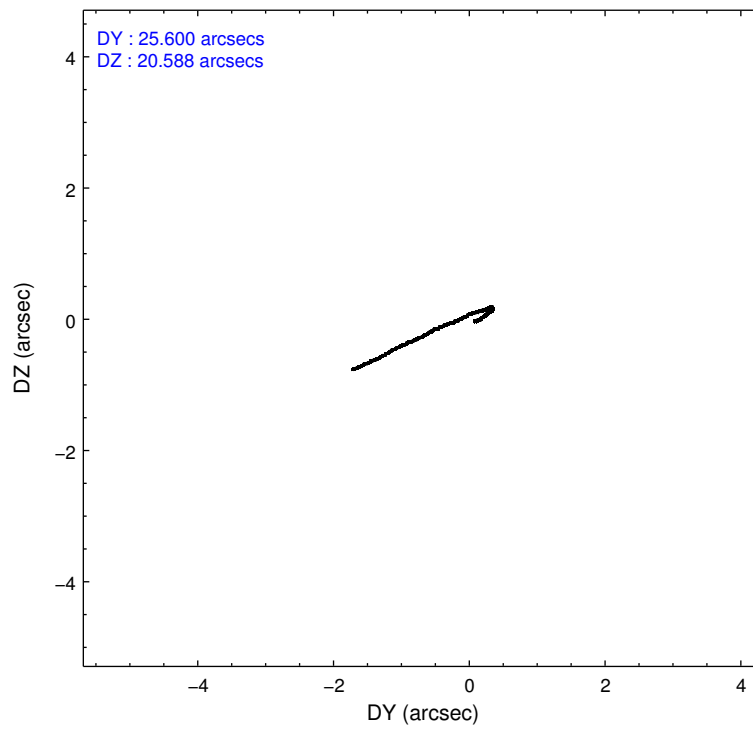
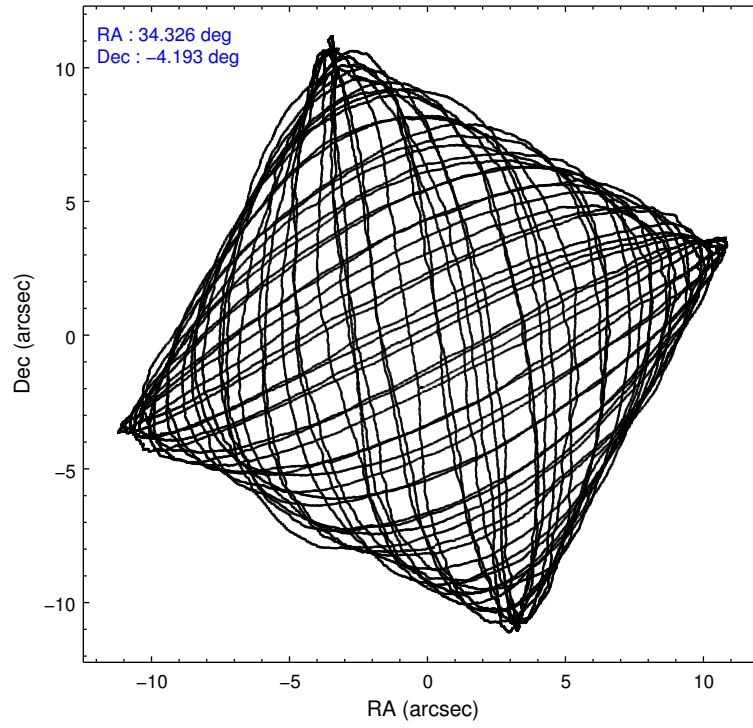
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	119716	120835	247172	125921	171352
rejected events	105715	107247	117659	110795	97925
rejected %	88%	88%	47%	87%	57%

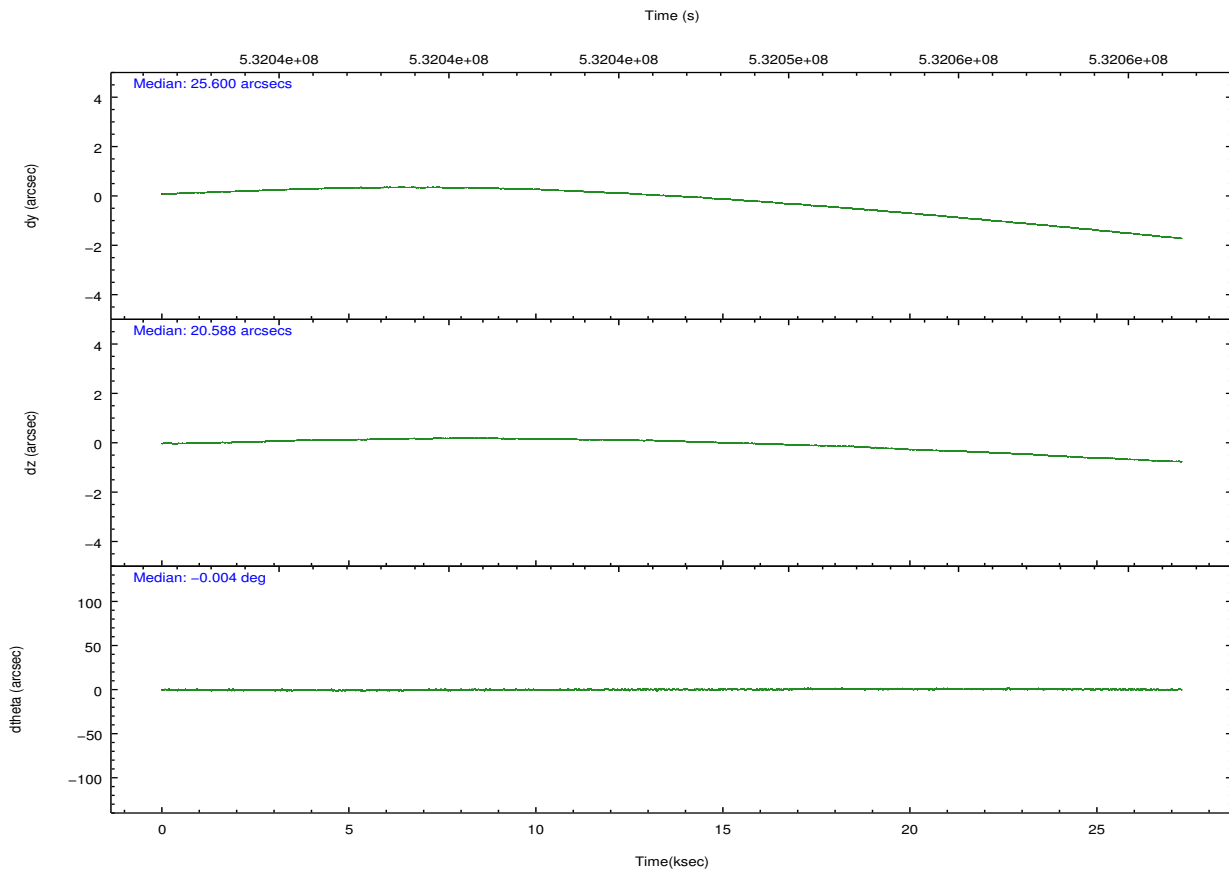
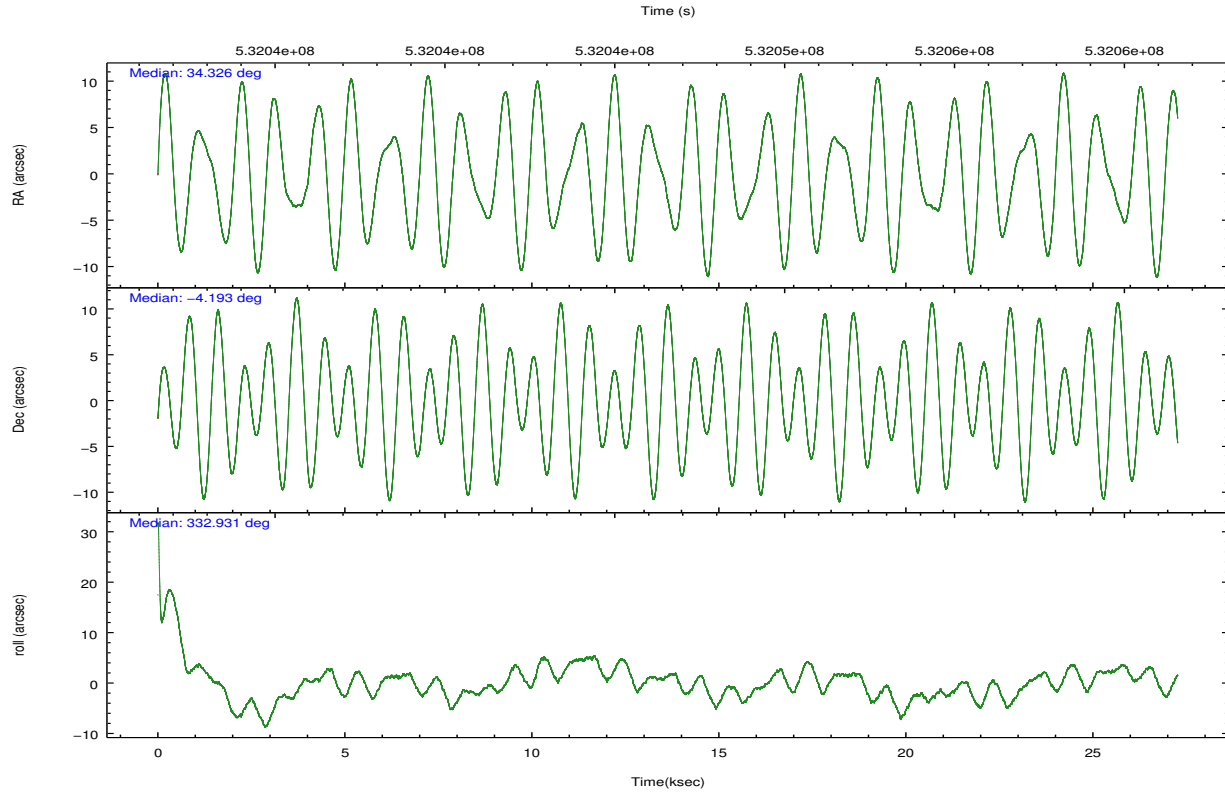
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	5013	4684	32191	4917	6232
	4%	3%	13%	3%	3%
grade 1 events	65	69	561	56	194
	0%	0%	0%	0%	0%
grade 2 events	3201	2985	32764	3556	15146
	2%	2%	13%	2%	8%
grade 3 events	1492	1478	4068	1541	5955
	1%	1%	1%	1%	3%
grade 4 events	1467	1480	4155	1488	5851
	1%	1%	1%	1%	3%
grade 5 events	5491	6557	15217	6561	17272
	4%	5%	6%	5%	10%
grade 6 events	2829	2965	56369	3626	40271
	2%	2%	22%	2%	23%
grade 7 events	100158	100617	101847	104176	80431
	83%	83%	41%	82%	46%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	34.298293	34.3257767835488	CCD I2 on	O1	Y
[deg] Pointing Dec	-4.195060	-4.193276950098189	CCD I3 on	O2	Y
[deg] Pointing Roll	332.776702	332.9353442368385	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	532033195.184000	532032216.3929	CCD S5 on	N	N
Observation start date	2014-11-10T18:58:48	2014-11-10T18:43:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	532060195.184000	532060853.35699	On-chip summing requested	N	N
Observation end date	2014-11-11T02:28:48	2014-11-11T02:40:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



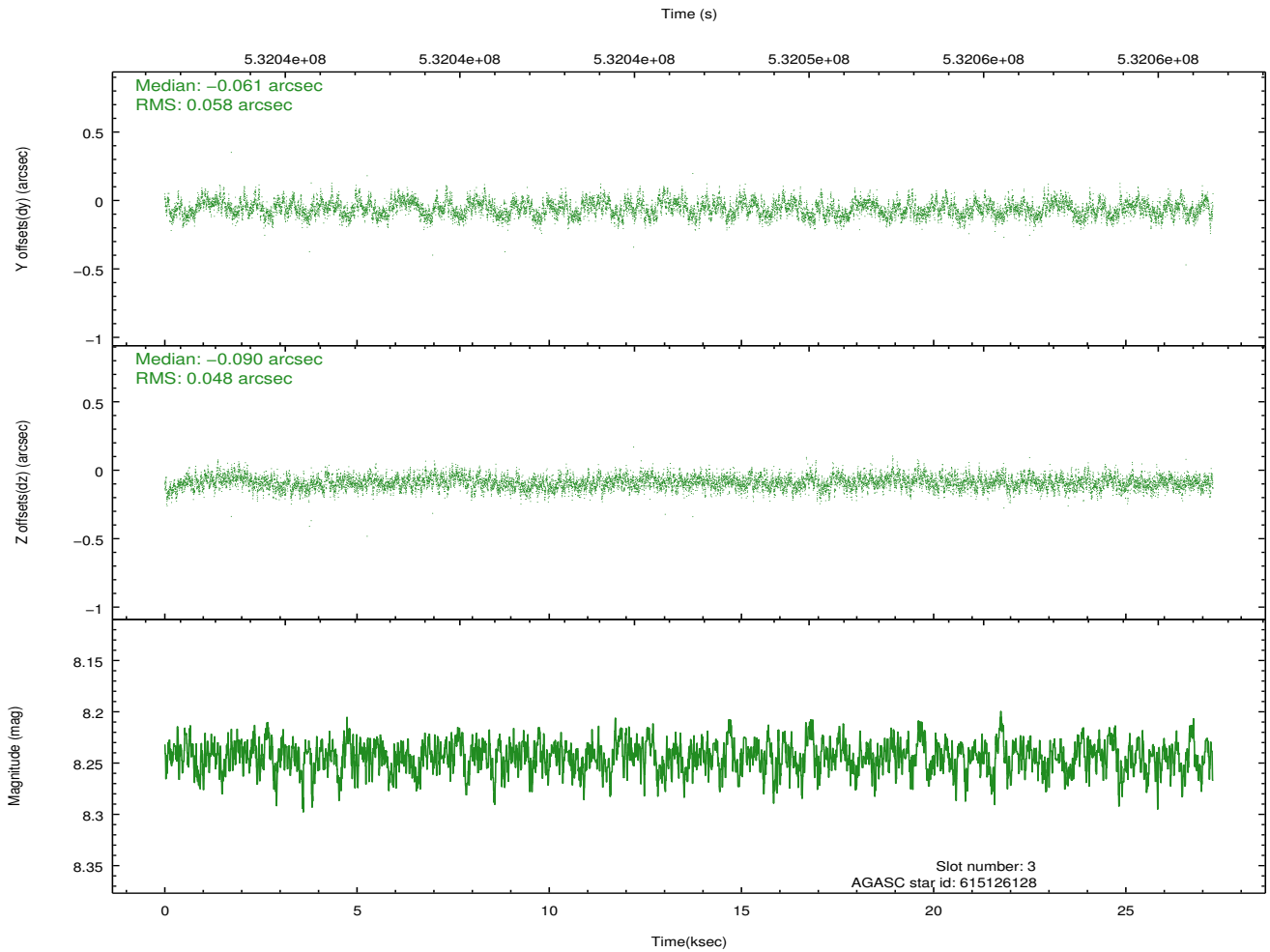
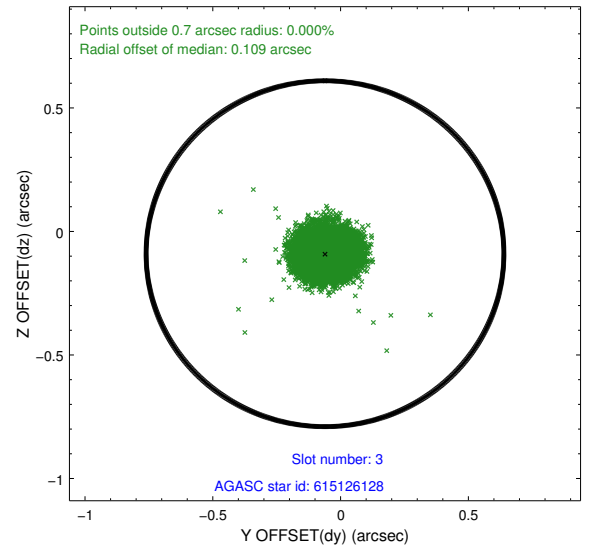
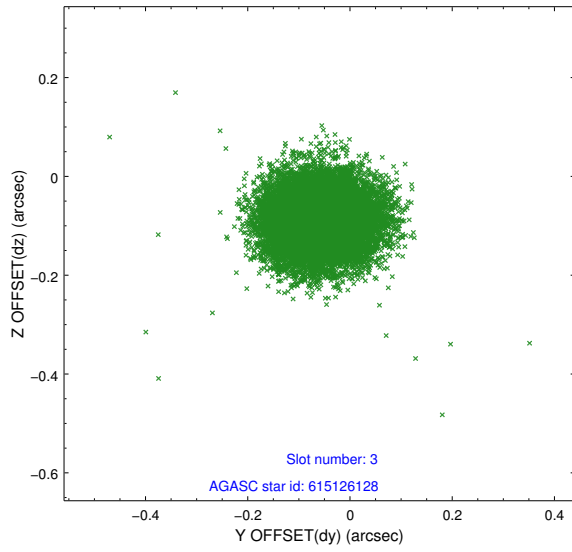


### Slot Statistics

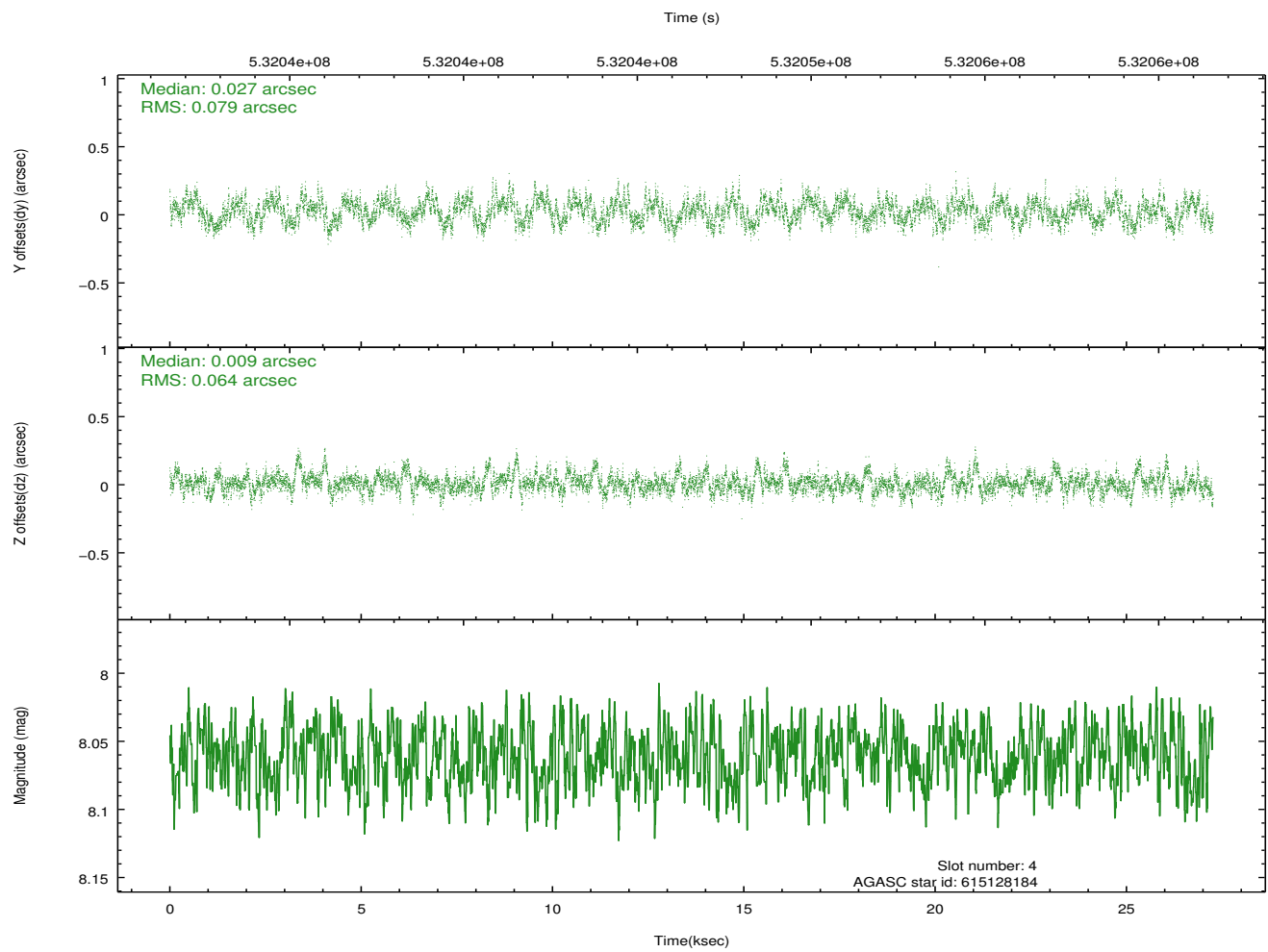
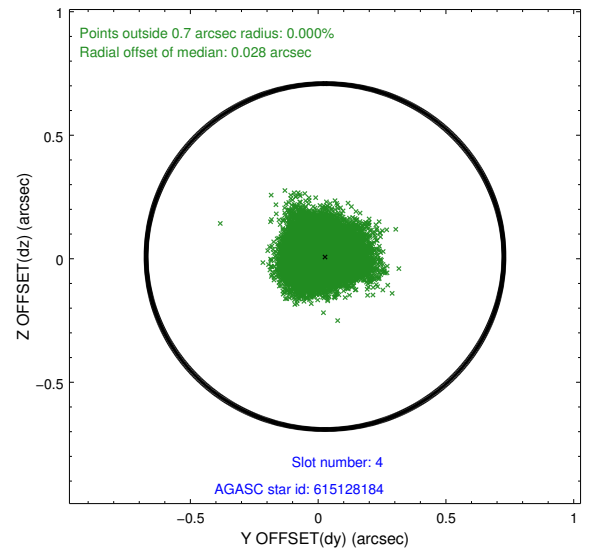
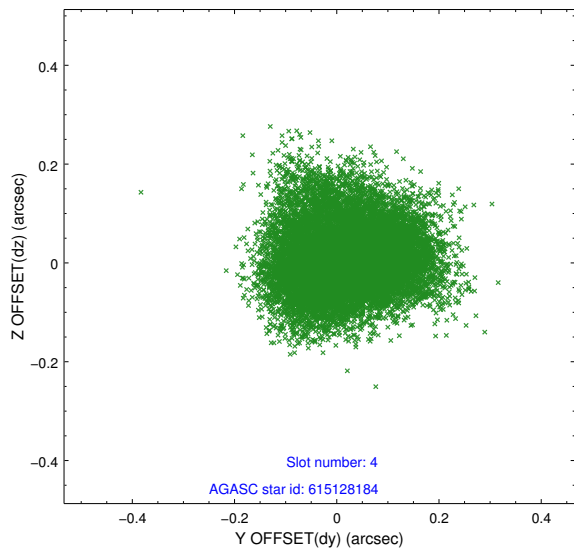
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.08	6651	-0.206	-0.016	0.010	0.018	0.000000	0.000000	-778.77	-1742.03
1	FID		ACIS-S-4	7.19	6651	0.394	0.103	0.010	0.019	0.000000	0.000000	2135.06	166.49
2	FID		ACIS-S-5	7.20	6651	-0.218	-0.079	0.012	0.027	0.000000	0.000000	-1831.51	160.06
3	GUIDE	used	615126128	8.24	13297	-0.061	-0.090	0.080	0.126	34.026050	-3.868420	-1407.00	597.98
4	GUIDE	used	615128184	8.06	13297	0.027	0.009	0.111	0.175	34.627231	-4.869545	2160.58	-1619.41
5	GUIDE	used	615128304	8.56	13298	-0.169	-0.158	0.084	0.135	34.566287	-4.097564	696.53	753.04
6	GUIDE	used	615129992	8.42	13294	0.108	0.217	0.090	0.143	33.989595	-4.095121	-1147.05	-186.53
7	GUIDE	used	615130056	6.96	13298	0.097	0.017	0.087	0.141	34.919909	-4.345572	2232.82	538.41

## 2.4 Star Slots

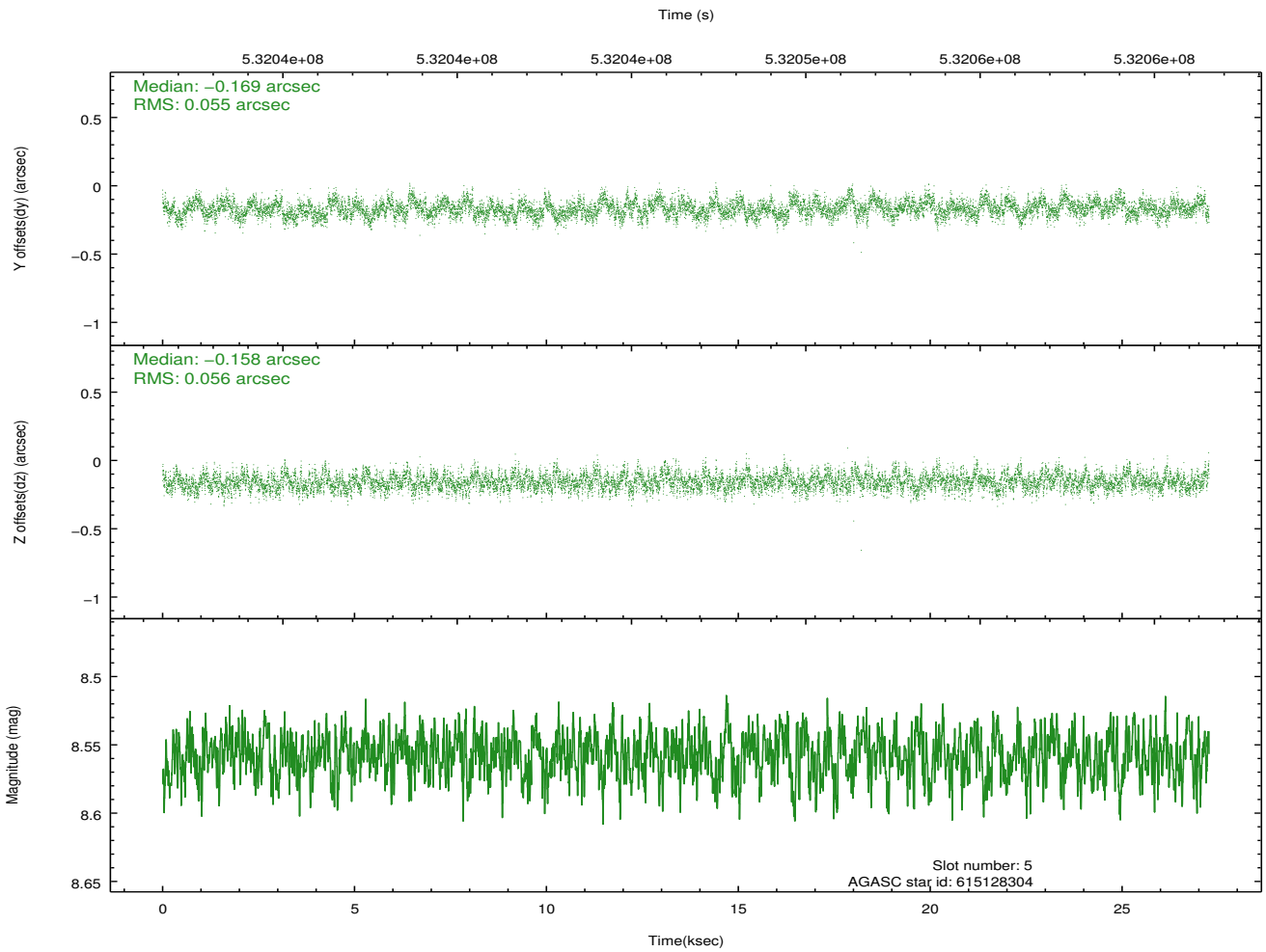
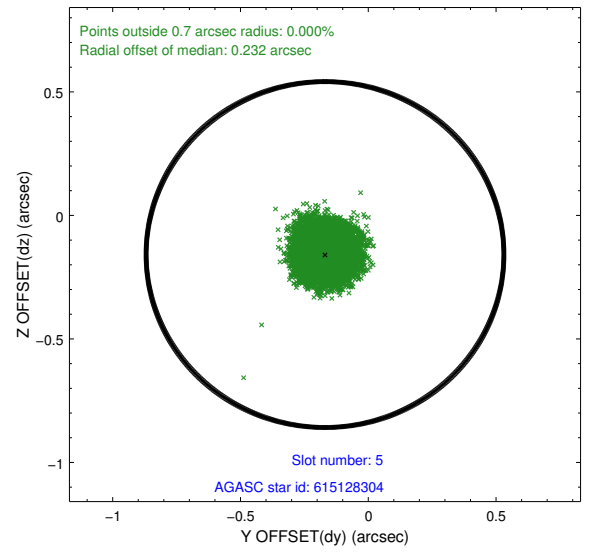
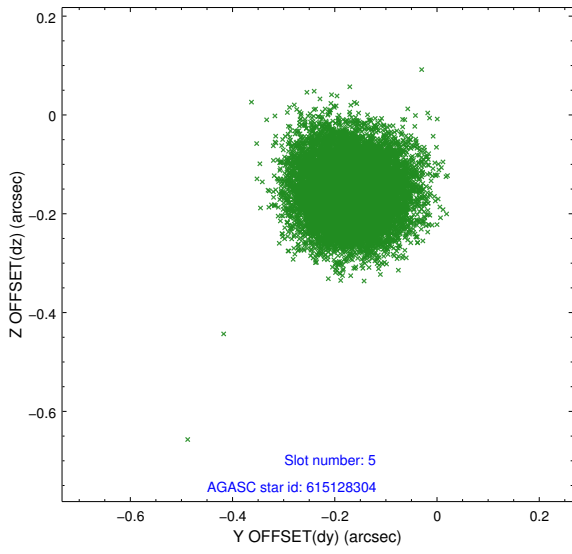
### 2.4.1 Slot 3



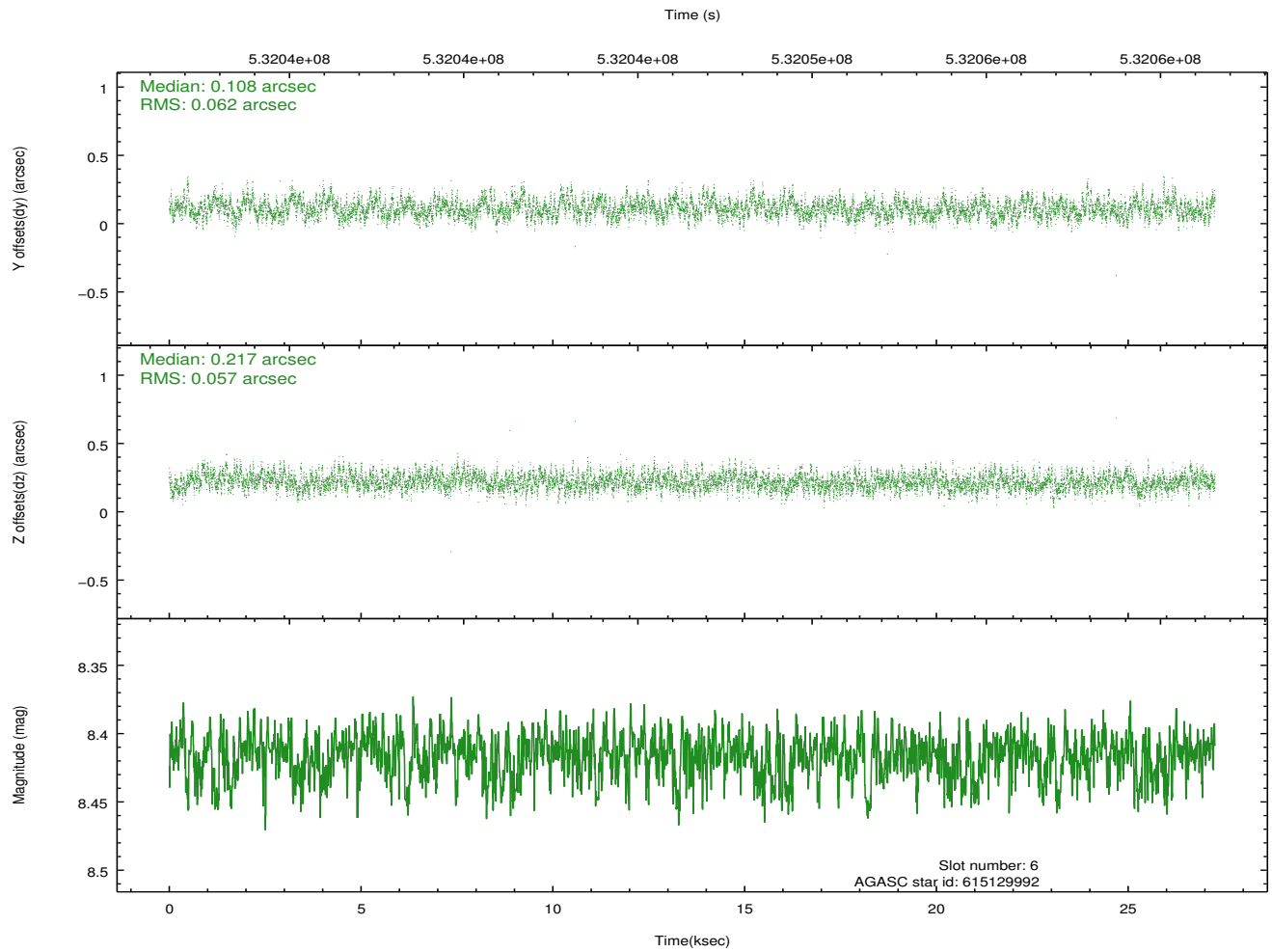
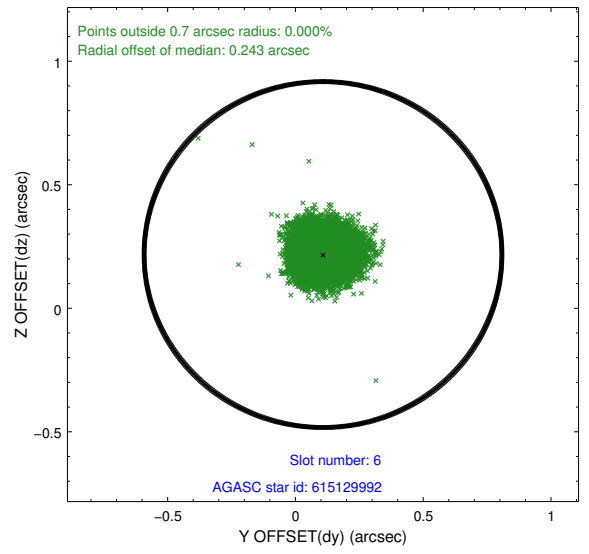
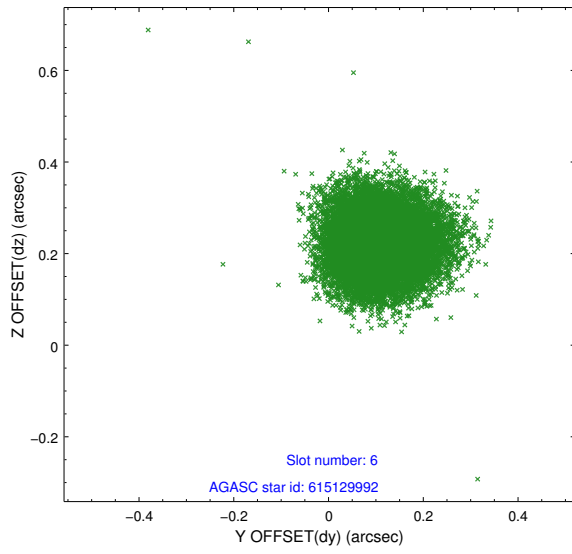
## 2.4.2 Slot 4



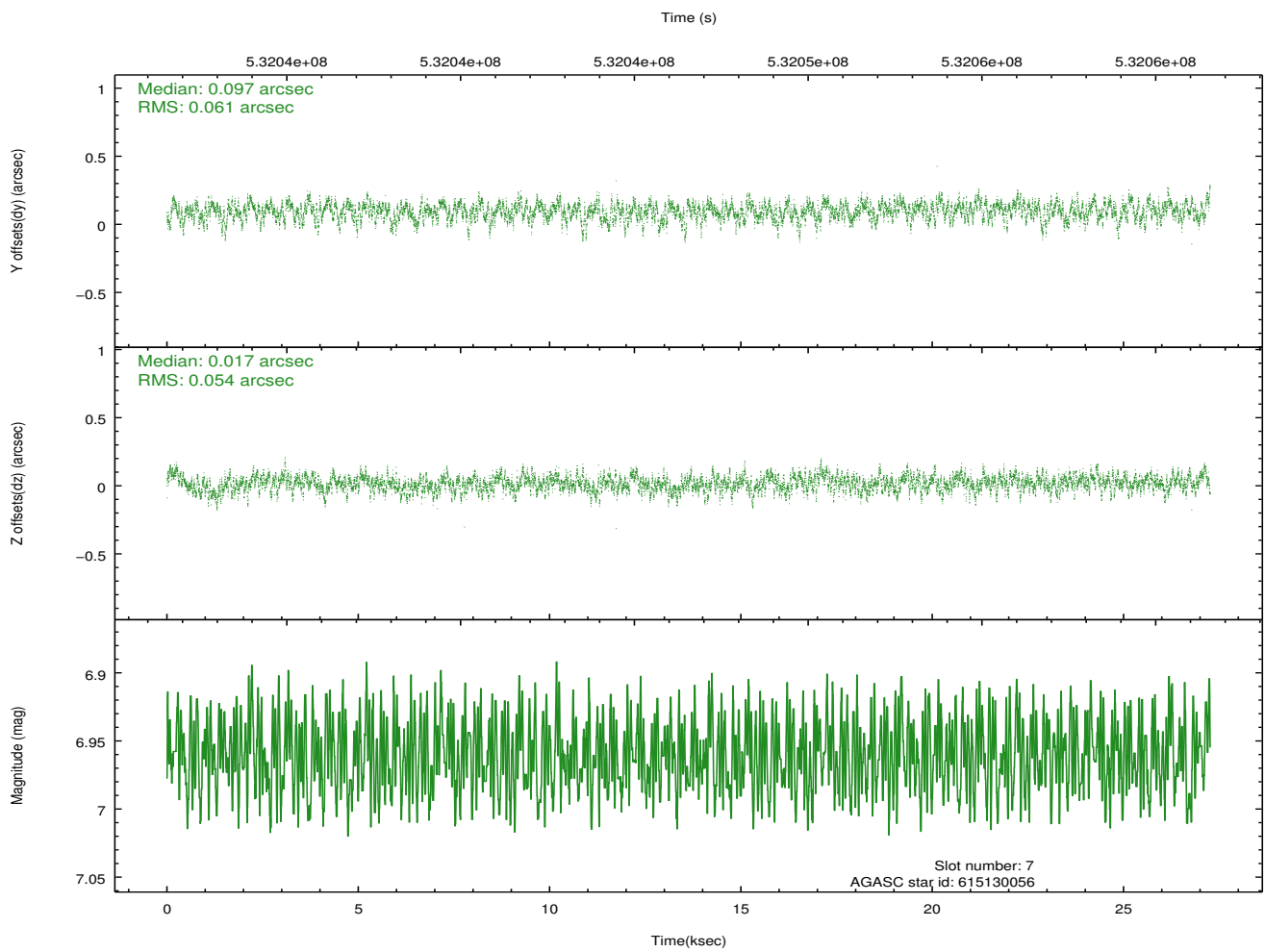
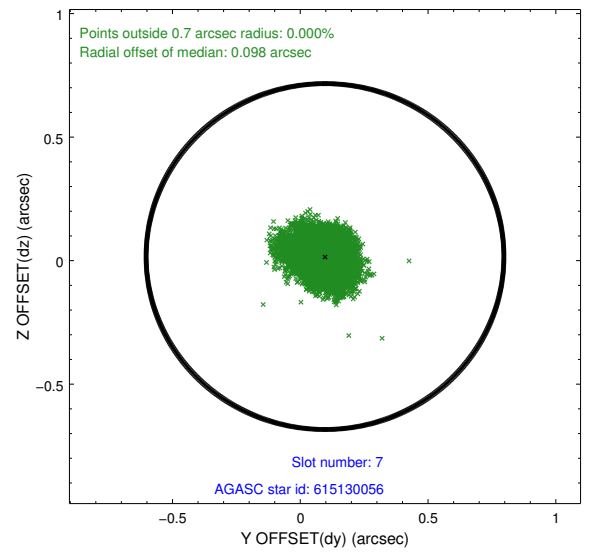
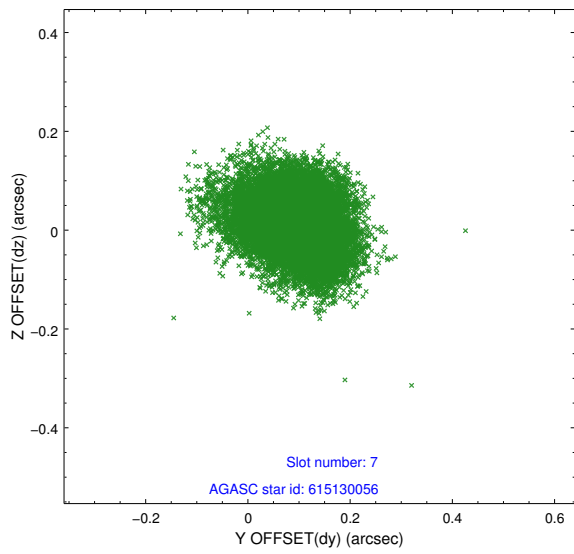
### 2.4.3 Slot 5



## 2.4.4 Slot 6

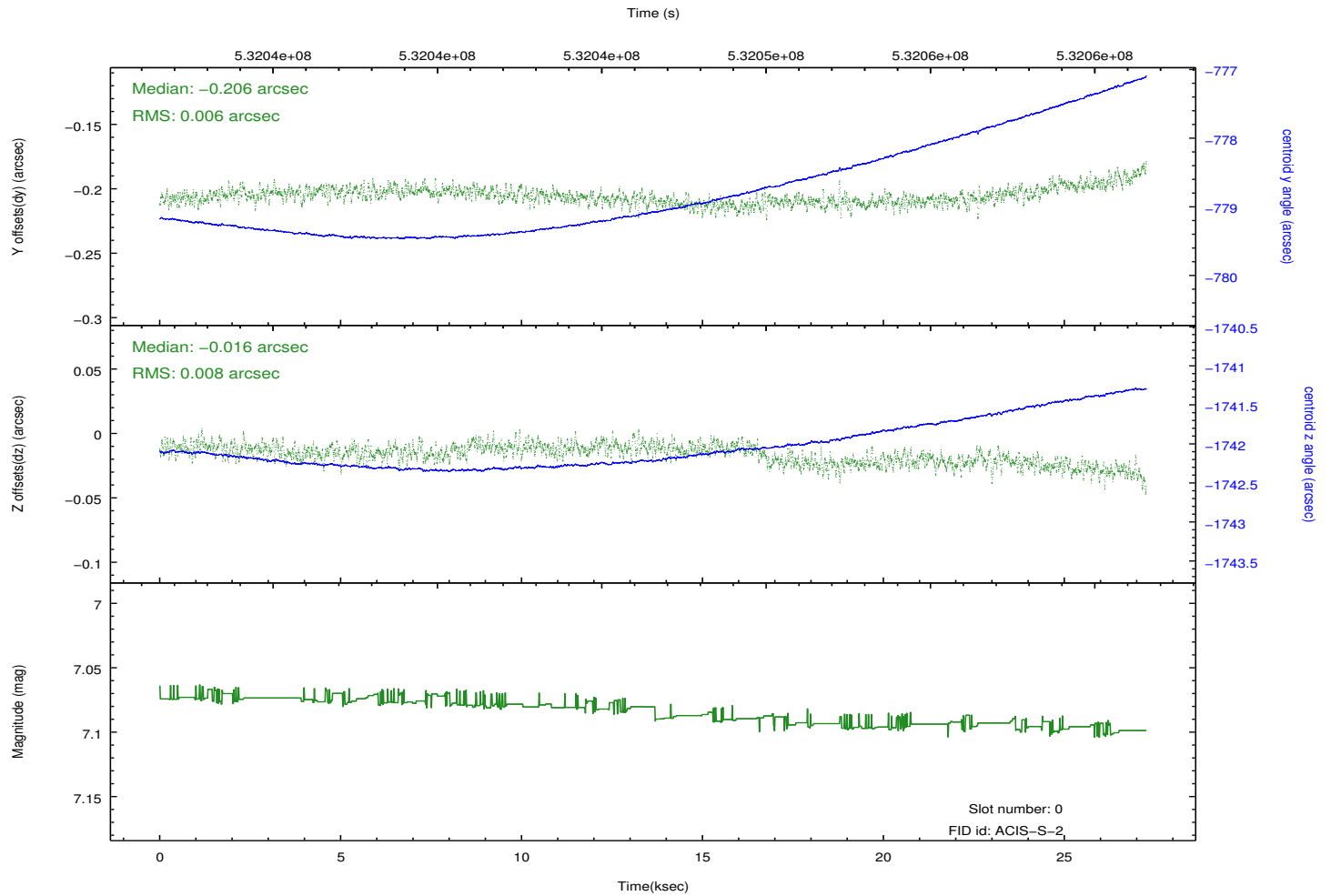
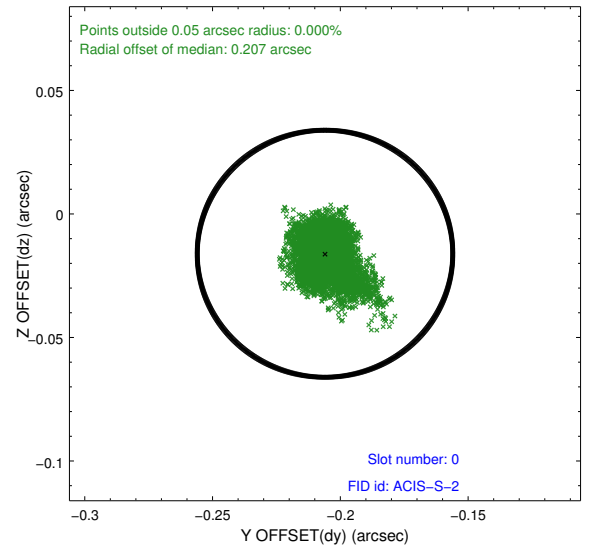
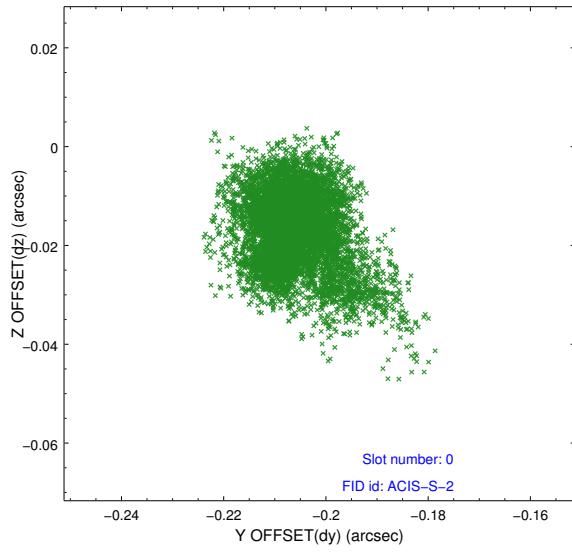


## 2.4.5 Slot 7

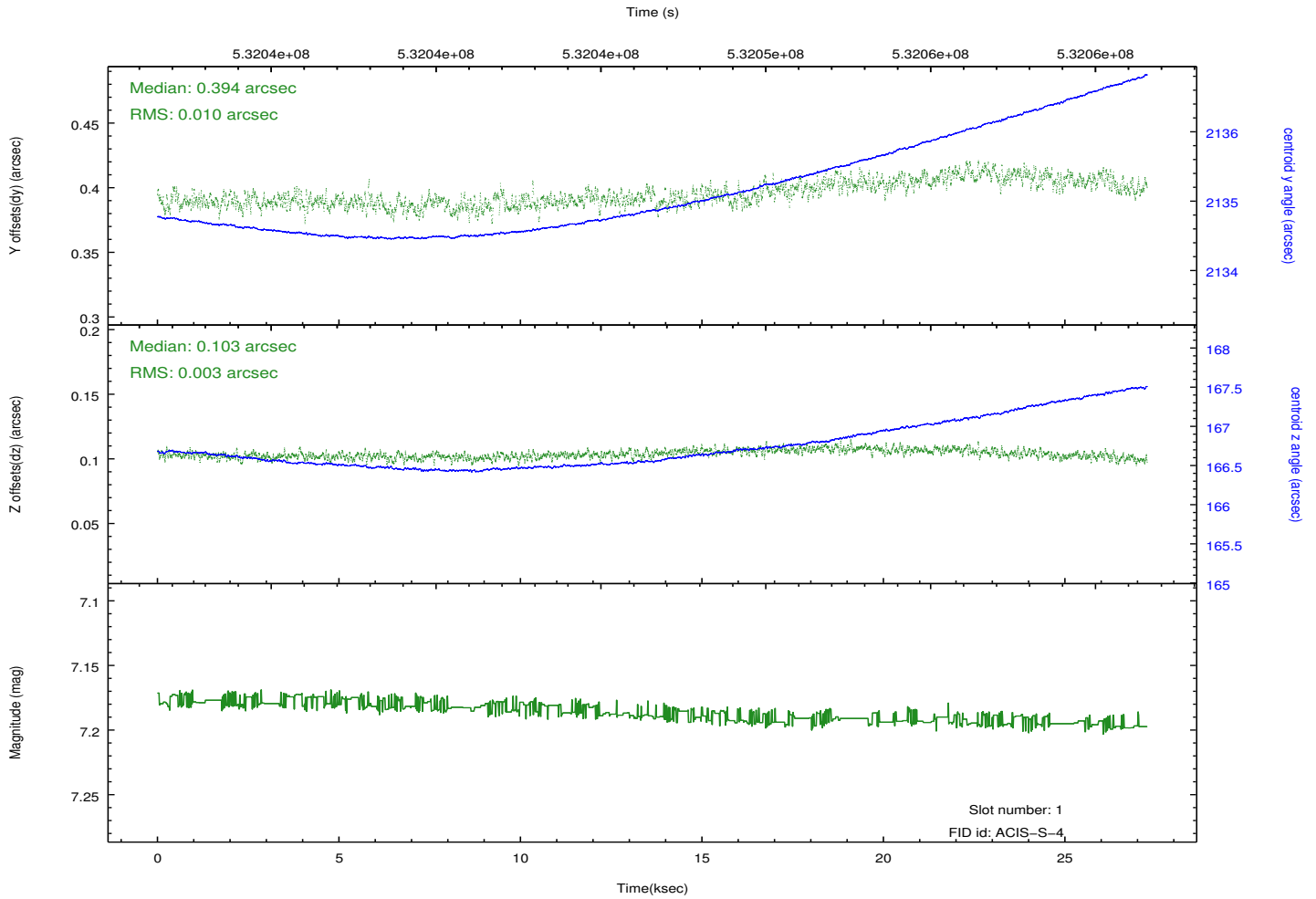
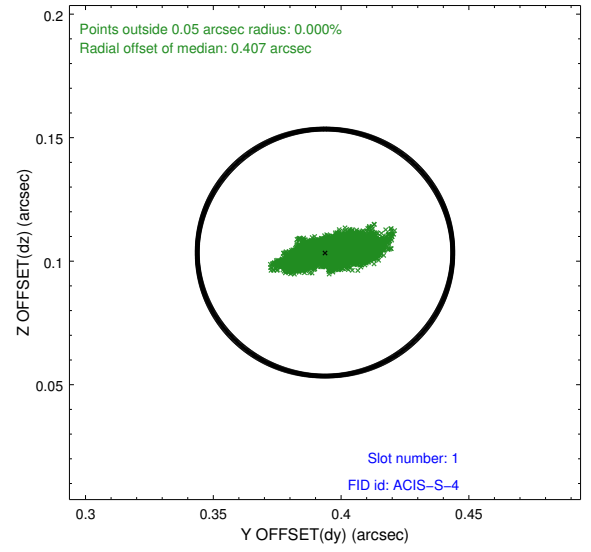
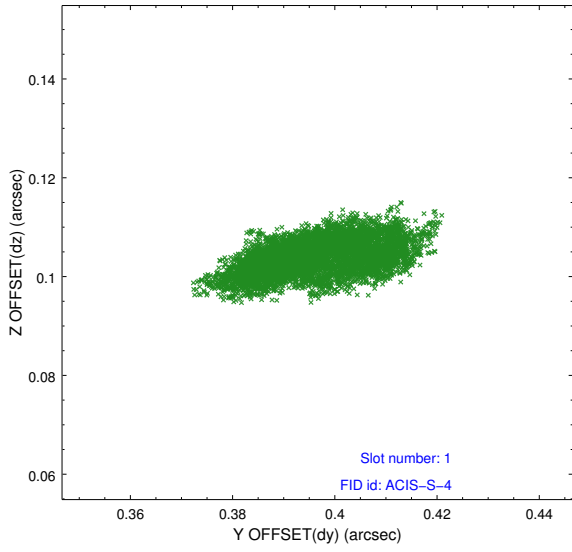


## 2.5 FID Slots

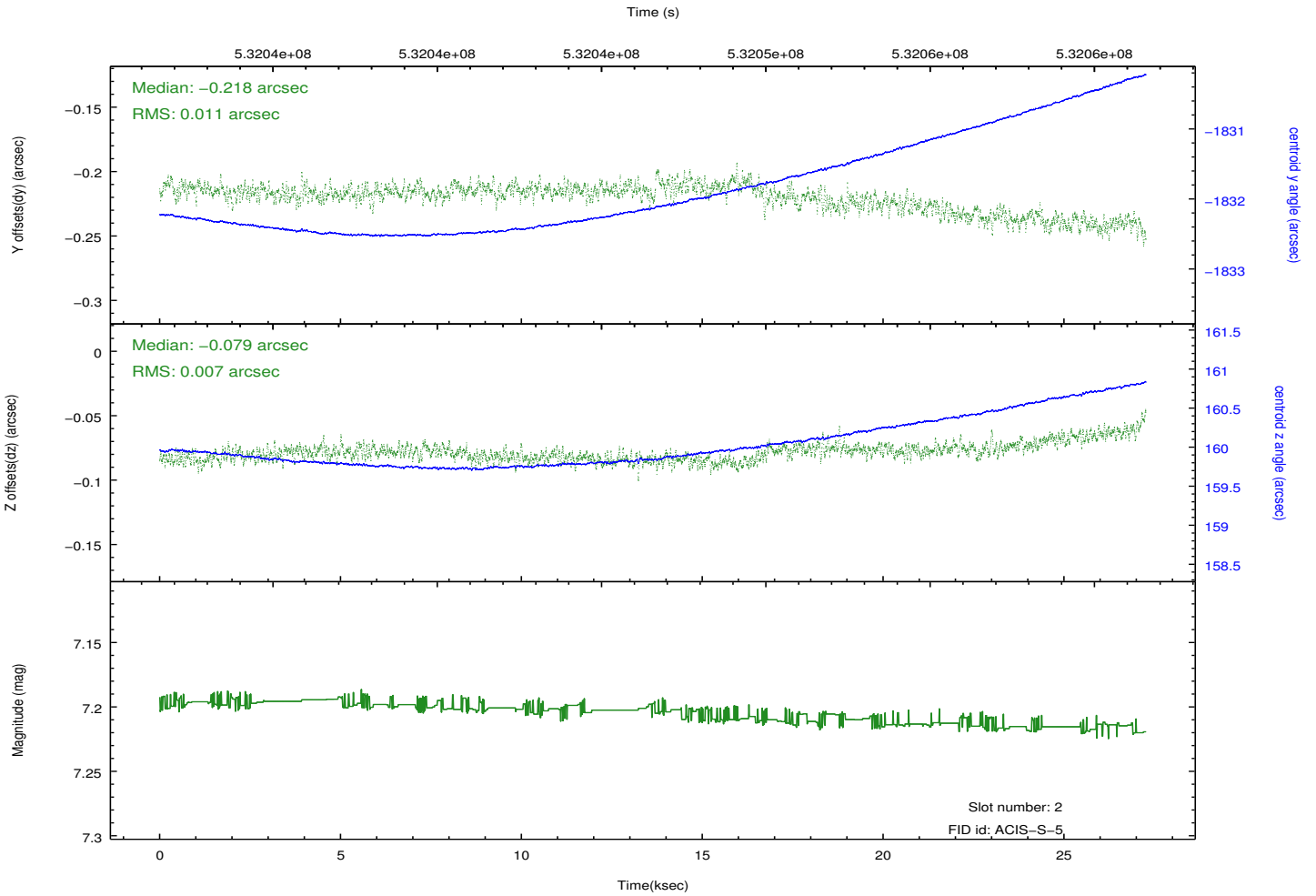
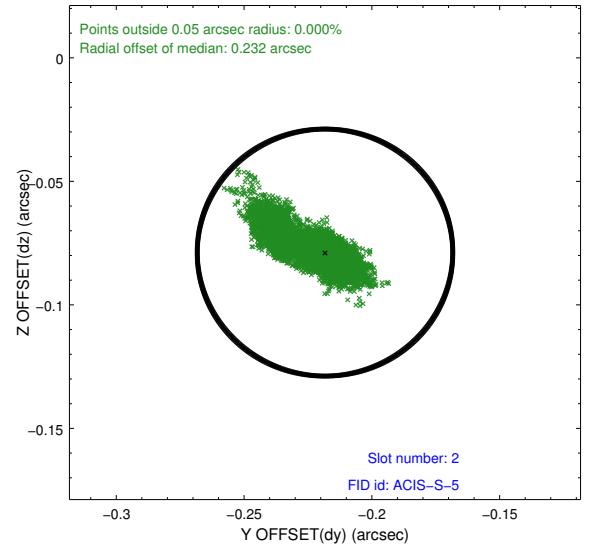
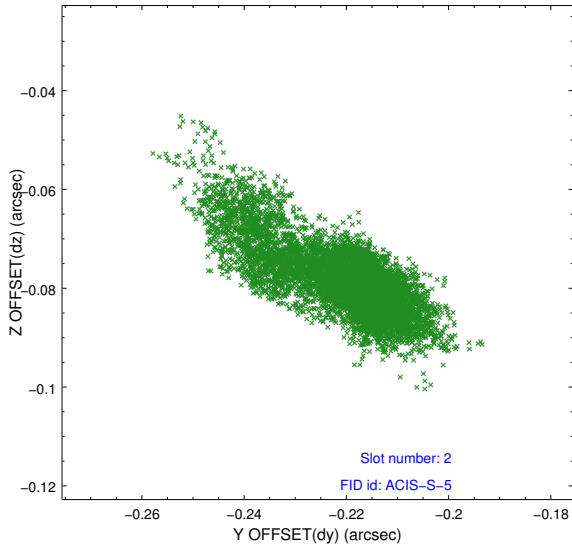
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.11.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.066100208163

## A.2 Comments